LIFE SOURCE®

MINI MANUAL INFLATE

Blood Pressure Monitor

A&D Medical

Trilingual Instruction Guide – MODEL UA-704

English ▪ Français ▪ Español

THIS MONITOR IS CLINICALLY VALIDATED

This LifeSource® blood pressure monitor has undergone and passed a Clinical Validation study to determine the performance and accuracy. This monitor is clinically validated according to the British Hypertension Society (BHS) standard. The BHS is the most prestigious international blood pressure organization. The published study was performed by a reviewing committee consisting of physicians and/or nurses. Among blood pressure manufacturers, A&D Medical is proud to have the highest number of Clinically Validated monitors with a positive recommendation from professionals that are available to consumers.

The monitor is recommended by the Canadian Hypertension Society.

IMPORTANT INFORMATION

Please read this important information before using your monitor.

- ☞ Please remember that only a medical practitioner is qualified to interpret your blood pressure measurements. Use of this device should not replace regular medical examinations.
- ☞ Have your physician review your procedure for using this device. He or she will want to verify blood pressure measurements before prescribing or adjusting medications.
- ☞ Consult your physician if you have any doubt about your readings. Should a mechanical problem occur, contact A&D Medical.
- ☞ Make sure to use the correct cuff size when measuring your blood pressure.
- ☞ Do not attempt to service, calibrate, or repair this monitor.
- ☞ Because your UA-704 monitor contains delicate, high-precision parts, avoid exposing it to extremes in temperature or humidity or to direct sunlight, shock and dust. A&D Medical guarantees the accuracy of this monitor only when it is stored and used within the temperature and humidity ranges noted on page E-16.
- ☞ Clean the monitor and cuff with a dry, soft cloth or a cloth dampened with water and a mild detergent. Never use alcohol, benzene, thinner or other harsh chemicals to clean monitor or cuff.
- ☞ Remove and replace battery if monitor is not used for more than **six months**. Alkaline battery recommended.

PRECAUTIONS

The UA-704 is designed to be used at home, by those who are eighteen (18) years and older, to monitor blood pressure (systolic and diastolic) and pulse rate. It is not designed for ambulatory use.

LIFESOURCE®

Fast. Easy. Accurate.

Congratulations on purchasing a state-of-the-art LifeSource® blood pressure monitor—one of the most technologically advanced monitors available today. Designed for ease of use and accuracy, this monitor will facilitate your daily blood pressure regimen.

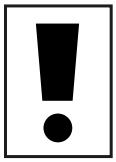
Physicians agree that daily self-monitoring of blood pressure is an important step individuals can take to maintain cardiovascular health and prevent the serious consequences associated with undetected and untreated hypertension.

A&D Medical has been manufacturing high quality healthcare products for over 20 years. We are committed to providing you and your family with monitoring devices that provide the utmost in accuracy and convenience.

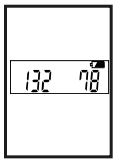
LifeSource - Designed for Life.

TABLE OF CONTENTS

WHAT DISPLAY SYMBOLS MEAN E-2
MONITOR COMPONENTS E-3
HOW UA-704 WORKS E-4



BEFORE YOU START E-4
SELECTING THE CORRECT CUFF SIZE E-5



TAKING YOUR BLOOD PRESSURE . . . . . E-6 — E-8
WHAT IS AN IRREGULAR HEARTBEAT E-9

ABOUT BLOOD PRESSURE . . . . . E-10 — E-14

TROUBLESHOOTING E-15
SPECIFICATIONS E-16

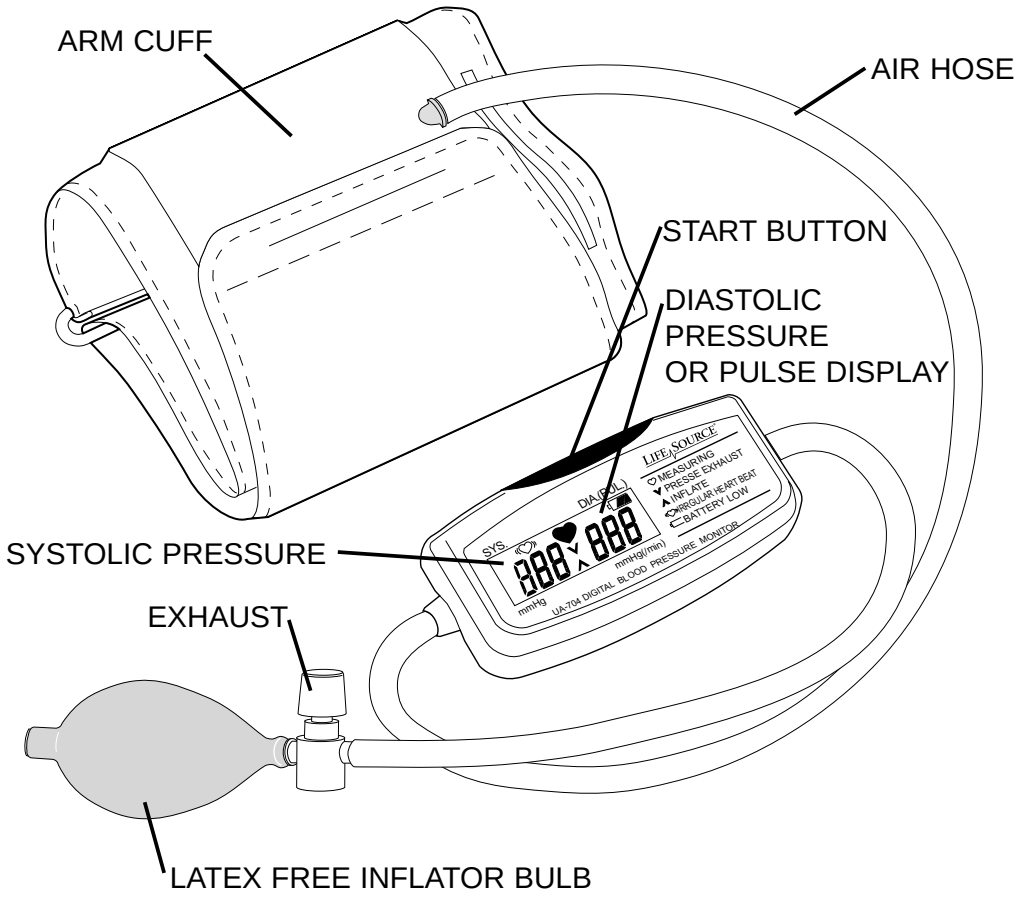
CONTACT INFORMATION E-17

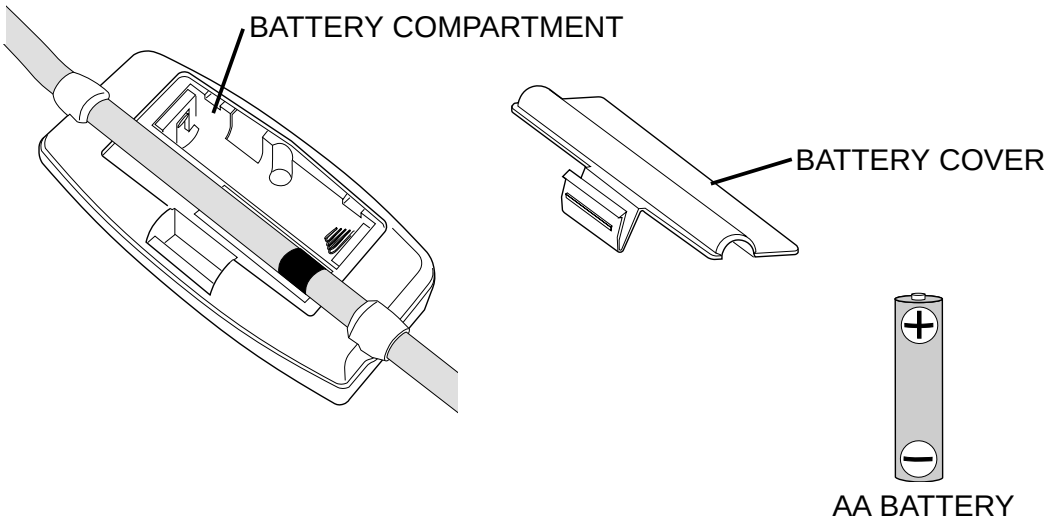
FRENCH INSTRUCTIONS F-1
SPANISH INSTRUCTIONS S-1

WHAT DISPLAY SYMBOLS MEAN

Display Symbol	Condition/Cause	Recommended Action
	The symbol shown while measurement is in progress. It blinks while detecting the pulse.	Measurement is in progress, remain as still as possible.
	An irregular heartbeat or body movement may have occurred. Refer to page E-9 for more information on irregular heartbeats.	Take measurement again and consult with your physician.
Battery Full	The battery power indicator during measurement.	Replace battery with new one when the symbol blinks. Alkaline battery recommended.
Battery Low	The battery is low when it blinks.	
Err	Unstable blood pressure due to excessive body movement.	Try the measurement again. Remain very still during the measurement.
	The systolic and diastolic values are within 10 mmHg of each other.	Fasten the cuff correctly, and try the measurement again.
	The pressure value did not increase during inflation.	Check for air leaks along the tube and around the air socket.
Err CUF	The cuff is not fastened correctly.	Refasten the cuff and retake measurement.
	There is an air leak in the cuff or monitor.	Make sure tube is properly connected to cuff and monitor.
Err PULSE DISPLAY ERROR	The pulse is not detected correctly.	Try the measurement again. Remain very still during the measurement.
	Appears on display prior to and during measurement. Blinks if there is air in cuff at power up.	Press exhaust button to release air.
	Cuff needs to be inflated for proper measurement.	Inflate cuff 30 to 40 mmHg above your normal systolic pressure.

MONITOR COMPONENTS





? HOW UA-704 WORKS

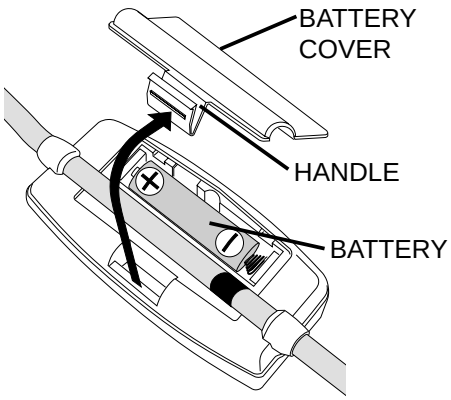
LifeSource® blood pressure monitors are easy to use, accurate and digitally display full measurement readouts. Our technology is based on the "oscillometric method" – a noninvasive blood pressure determination. The term "oscillation" refers to any measure of vibrations caused by the arterial pulse. Our monitor examines the pulsatile pressure generated by the arterial wall as it expands and contracts against the cuff with each heartbeat.

The cuff is inflated until the artery is fully blocked. The inflation speed is maximized and the pressure level is optimized by the device. The monitor takes measurements while the cuff is both inflating and deflating. This results in a faster measurement providing greater comfort to the user.

! BEFORE YOU START

You must install 1 type AA (1.5 volt) battery and attach the cuff to the monitor before using it (alkaline battery recommended). To install battery (or replace it if the "Low Battery" symbol appears on display), proceed as follows:

1. Remove battery cover by gently pushing down on handle and pulling cover off monitor.
2. Place the battery in compartment with positive (+) and negative (–) terminals matching those indicated in the compartment. Be sure battery makes contact with compartment terminals.
3. Replace cover by sliding it into the compartment and gently pressing into place.



NOTE: Do not pull or remove air tubes from monitor.

NOTE: Rechargeable batteries will not work with this monitor.

SELECTING THE CORRECT CUFF SIZE

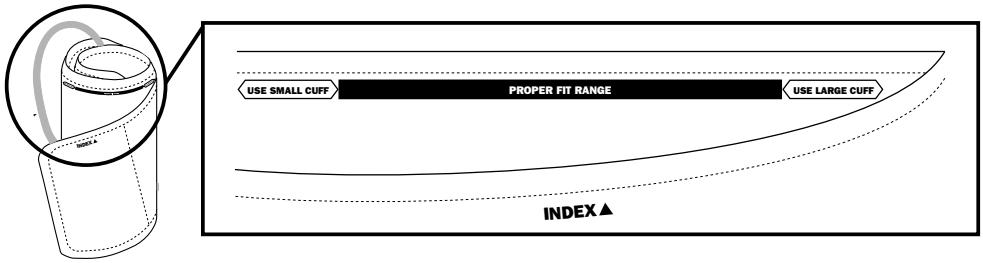
Using the correct cuff size is important for an accurate reading. A cuff that is too large will produce a reading that is lower than the correct blood pressure; a cuff that is too small will produce a reading that is higher than the correct blood pressure. With your arm hanging at the side of your body, measure the circumference of your upper arm at the midpoint between the shoulder and elbow.

ARM SIZE	RECOMMENDED CUFF SIZE	REPLACEMENT CUFF MODEL#
9.4" - 14.2" (24-36cm)	Medium Cuff	UA-280
14.2" - 17.7" (36-45cm)	Large Cuff	UA-281

NOTE: The LifeSource small cuff is not compatible with the UA-704 monitor.

■ Cuff Size Indicator On The Cuff

Our cuff has an indicator which tells you whether you are using the correct cuff size or not. Place the cuff on your arm (see Page E-6 to learn how to put the cuff on correctly) and if the Index Mark ▲ points within the Proper Fit Range, you are using the correct cuff size. If the Index points outside of the Proper Fit Range, contact A&D Medical at 1-888-726-9966 (in Canada, call Auto Control Medical at 1-800-461-0991) for more information on where to obtain a cuff replacement.



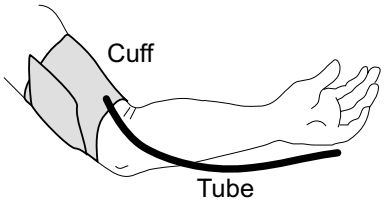
TAKING YOUR BLOOD PRESSURE

Tips for Blood Pressure Monitoring:

- ☞ Relax for about 5 minutes before measurement.
- ☞ Do not smoke or ingest caffeine at least 30 minutes prior to measurement.
- ☞ Remove constricting clothing and place cuff on bare arm.
- ☞ Unless your physician recommends otherwise, use left arm to measure pressure.
- ☞ Do not talk during measurement.
- ☞ Do not cross legs and keep you feet flat on floor during measurement.

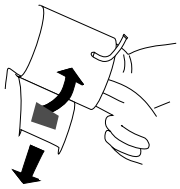
Now you are ready. Follow these simple steps:

1. Sit comfortably with your left arm resting on a flat surface so that the center of your upper arm is at the same height as your heart.



2. Lay left arm on the table, palm up and thread cuff end through metal loop, smooth side against arm. Then position the tube off-center toward the inner side of arm in line with the little finger.

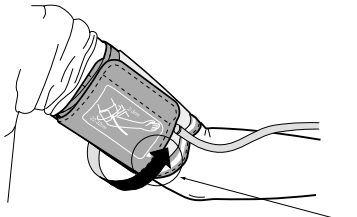
3. Pull the end of the cuff to tighten it, fold back the extra material, and fasten securely. The cuff should be snug but not too tight. You should be able to insert two fingers between the cuff and your arm.



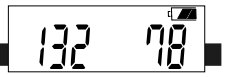
IMPORTANT: Measure pressure at the same time each day.

4. Confirm that the index ▲points within the proper fit range.

5. With the monitor placed in your left palm, press the START button.

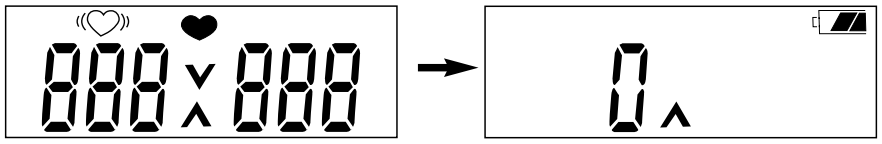

Index ▲ and Proper Fit range

LifeSource Health Line (Toll-Free): 1-888-726-9966



6. Watch for all display symbols to appear briefly, followed by a "0", indicating that monitor is ready for measurement.

7. If the ▼ symbol is displayed, the cuff has some air trapped in it. Press the exhaust valve button until the ▲ symbol is displayed. You may have to press on the cuff while holding the exhaust valve to release all the air in the cuff.

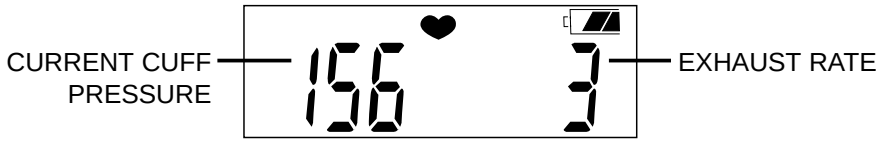


8. When the ▲ symbol is displayed, begin cuff inflation by squeezing the inflator bulb repeatedly. It may take a few seconds for the ▲ symbol to appear.

9. Stop squeezing the inflator bulb when ▲ symbol disappears or until cuff pressure reaches about 30 mmHg to 40 mmHg above expected systolic pressure. If inflating to a level above your expected systolic pressure, we recommend using the chart shown below to determine your inflation level.

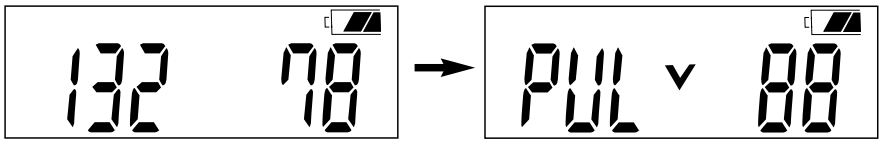
Usual Systolic	Inflate to
Up to 130	160
131-170	200
171-210	240
211-250	280

10. When the correct pressurization has been reached, the automatic exhaust mechanism will gradually reduce the pressure in the cuff. Sit quietly during measurement. The ❤ symbol will blink with your pulse beat.



NOTE: Exhaust rate cannot be adjusted during measurement. If you wish to stop inflation at any time, press the exhaust valve to release the pressure in the cuff.

11. When ▼ is flashing, indicating that the measurement is complete, your systolic pressure will appear on the left and your diastolic pressure on the right of the display screen, alternating with pulse rate reading.



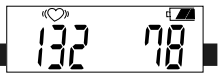
12. Press the exhaust valve to release the excess air from the cuff. If you move your arm before pressing the exhaust valve, the result on the screen will be deleted. The monitor shuts off automatically in about 30 seconds. You can also press the START button to shut off the monitor.

13. Remove cuff and make a note of your blood pressure and pulse rate on the chart in the back of the manual, indicating date and time of measurement. Additional logbook charts can be downloaded and printed for free at www.LifeSourceOnline.com or in Canada, www.autocontrol.com.

We advise that you record the date and time after each measurement because an accurate blood pressure history relies not on single or sporadic readings but on a pattern over time.

NOTE: Allow at least 5 minutes between measurements on the same person.

WHAT IS AN IRREGULAR HEARTBEAT



The UA-704 Blood Pressure Monitor provides a blood pressure and pulse rate measurement even when an irregular heartbeat occurs. The Irregular Heartbeat symbol ((♡)) will appear in the display window in the event an Irregular Heartbeat has occurred during measurement. An irregular heartbeat is defined as a heartbeat that varies by 25% from the average of all heartbeat intervals during the blood pressure measurement. It is important that you relax, remain still and refrain from talking during measurements.

NOTE: We recommend contacting your physician if you see this ((♡)) symbol frequently.

ABOUT BLOOD PRESSURE

■ What Is Blood Pressure?

Blood pressure is the force exerted by blood against the walls of the arteries. Systolic pressure occurs when the heart contracts; diastolic pressure occurs when the heart expands. Blood pressure is measured in millimeters of mercury (mmHg).

■ What Affects Blood Pressure?

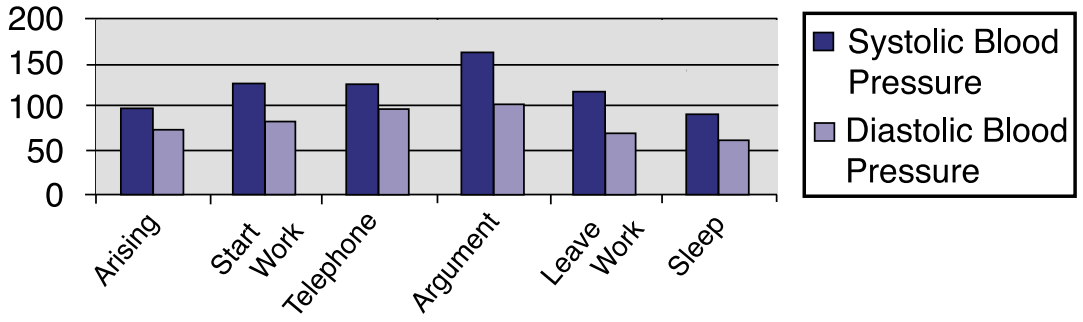
Blood pressure is affected by many factors: age, weight, time of day, activity level, climate, altitude and season. Certain activities can significantly alter one's blood pressure. Walking can raise systolic pressure by 12 mmHg and diastolic pressure by 5.5 mmHg. Sleeping can decrease systolic blood pressure by as much as 10 mmHg. Taking your blood pressure repeatedly without waiting an interval of 5 minutes between readings, or without raising your arm to allow blood to flow back to the heart, can also affect it.

In addition to these factors, beverages containing caffeine or alcohol, certain medications, emotional stress and even tight-fitting clothes can make a difference in the readings.

■ What Causes Variations In Blood Pressure?

An individual's blood pressure varies greatly from day to day and season to season. For hypersensitive individuals, these variations are even more pronounced. Normally, blood pressure rises during work or play and falls to its lowest levels during sleep.

Fluctuation within a day (case: 35 year old male)



■ Assessing High Blood Pressure for Adults

The following standards for assessing high blood pressure (without regard to age or gender) have been established as a guideline. Please note that other risk factors (e.g. diabetes, obesity, smoking, etc.) need to be taken into consideration and may affect these figures. Consult with your physician for an accurate assessment.

JNC7 Classification Table – for Adults within the U.S.

BP Classification	Systolic (mmHg)		Diastolic (mmHg)
Normal	less than 120	and	less than 80
Prehypertension	120-139	or	80-89
Stage 1 Hypertension	140-159	or	90-99
Stage 2 Hypertension	greater than or equal to 160	or	greater than or equal to 100

SOURCE: The Seventh Report of the Joint National Committee on Prevention, Evaluation and Treatment of High Blood Pressure for Adults. National Heart, Lung and Blood Institute - May 2003.

WHO Classification Table – for Adults outside of the U.S. (e.g. Canada, Mexico)

BP Classification	Systolic (mmHg)		Diastolic (mmHg)
Optimal	less than 120	and	less than 80
Normal	less than 130	or	less than 85
High-Normal	130-139	or	85-89
Stage 1 Hypertension	140-159	or	90-99
Stage 2 Hypertension	160-179	or	100-109
Stage 3 Hypertension	greater than or equal to 180	or	greater than or equal to 110

SOURCE: Standards to assess high blood pressure, without regard to age or gender, have been established by the World Health Organization (WHO).

ABOUT BLOOD PRESSURE

What Is Hypertension?

Hypertension (high blood pressure) is the diagnosis given when readings consistently rise above normal. It is well known that hypertension can lead to stroke, heart attack or other illness if left untreated. Referred to as a "silent killer" because it does not always produce symptoms that alert you to the problem, hypertension is treatable when diagnosed early.

Can Hypertension Be Controlled?

In many individuals, hypertension can be controlled by altering lifestyle and-minimizing stress, and by appropriate medication prescribed and monitored by your doctor. The American Heart Association recommends the following lifestyle suggestions to prevent or control hypertension:

- **Don't smoke.**
- **Reduce salt and fat intake.**
- **Maintain proper weight.**
- **Exercise routinely.**
- **Have regular physical checkups.**
- **Monitor your blood pressure at periodic intervals.**

Why Measure Blood Pressure at Home?

It is now well known that, for many individuals, blood pressure readings taken in a doctor's office or hospital setting might be elevated as a result of apprehension and anxiety. This response is commonly called "white coat hypertension." In any case, self-measurement at home supplements your doctor's readings and provides a more accurate, complete blood pressure history. In addition, clinical studies have shown that the detection and treatment of hypertension is improved when patients both consult their physicians and monitor their own blood pressureat home.

■ Answers to Why Your Readings Are Different Between Home and at the Doctor's Office

Why are my readings different between home and at a doctor's office?

Your blood pressure readings taken in a doctor's office or hospital setting may be elevated as a result of apprehension and anxiety. This response is known as white coat hypertension.

When I bring my monitor to a doctor's office, why do I get a different measurement from my monitor to that taken by a doctor or nurse?

The healthcare professional may be using a different sized cuff. The size of the bladder inside the cuff is critical for the accuracy of the measurement. This may give you a different reading. A cuff too large will produce a reading that is lower than the correct blood pressure; a cuff that is too small will produce a reading that is higher than the correct blood pressure. There may also be other factors that can cause the difference in measurements.

■ Keys to Successful Monitoring:

Blood pressure fluctuates throughout the day. We recommend that you are consistent in your daily measurement routine:

- Measure at the same time every day.
- Sit in the same chair/position.
- Do not cross legs and keep your feet flat on the floor.
- Relax for 5 minutes before measurement.
- Use the correct cuff size to get an accurate reading.
- Sit still during measurement – no talking, eating or sudden movements.
- Record your measurement in a logbook.

ABOUT BLOOD PRESSURE

■ Establishing Baseline Measurements

The most important method to get an accurate blood pressure measurement is consistency. To get the most benefit out of your monitor, it is important to establish a "baseline measurement." This helps build a foundation of measurements that you can use to compare against future readings. To build this baseline measurement, devote two weeks for consistent blood pressure monitoring. This involves doing everything the same way when you measure (e.g. measuring during the same time of day, in the same location, sitting in the same chair, using the same cuff, etc.). Once you establish your baseline measurement, you can start evaluating if your measurement has been affected based on things lifestyle changes or medication treatment.

■ How Do I Record My Blood Pressure?

Blood pressure readings are typically recorded with the systolic pressure written first, followed by a slash mark and the diastolic pressure. For example, 120 mmHg systolic and 80 mmHg diastolic measurements are written as 120/80. Pulse is simply written with the letter "P" followed by the pulse rate—P 72, for example. Please see the back of the manual for the blood pressure tracking record.

■ Customer Support Tools Online

Additional tools are available on www.LifeSourceOnline.com (in Canada - www.autocontrol.com) to help you get the most out of your blood pressure monitoring. These include:

- Large Print Instruction Manuals
- Animated Operating Instructions for select models
- Additional Logbook Sheets

Problem	Probable cause	Corrective action
Nothing appears in the display, after pressing the START button.	Battery is drained.	Replace battery with new one. Alkaline battery recommended.
	Battery terminals are not in the correct position.	Reinstall the battery with negative and positive terminals matching those indicated in the battery compartment.
The cuff does not deflate properly	Battery voltage is too low. Low battery symbol blinks. [If the battery is drained completely, the mark does not appear.]	Replace battery with new ones. Alkaline battery recommended.
The unit does not measure. Readings are too high or too low.	The cuff is not fastened properly.	Fasten the cuff correctly.
	You moved your arm or body during the measurement.	Make sure you remain very still and quiet during the measurement.
	The cuff position is not correct.	Sit comfortably and still. Make sure the cuff is at the same level as your heart.
	You are using the wrong size cuff.	See Pg. E-5 "Selecting the Correct Cuff."
	Taking too many readings on the same arm in a short period of time.	Relax five minutes before each measurement.
The value is different from that measured at a clinic or doctor's office.	The healthcare professional may be using a different sized cuff.	See Pg. E-13 "Answers to Why Your Readings Are Different Between Home and the Doctor's Office."
	Your measurements may be elevated by white coat hypertension	See Pg. E-12 "Why Measure Blood Pressure at Home."

NOTE: If the actions described above do not solve the problem, call 1-888-726-9966 (In Canada - 1-800-461-0991). Do not attempt to repair the device yourself.

SPECIFICATIONS

Model	UA-704
Type	Oscillometric
Display	Digital, 10-mm character height Pressure/pulse displayed alternately
Measurement range	Pressure: 20 mmHg to 280 mmHg Pulse: 40 pulses to 200 pulses/minute
Accuracy	Pressure: ± 3 mmHg or ± 2%, whichever is greater; Pulse: ± 5%
Pressurization	Manually by inflator bulb
Depressurization	Constant-air release-valve system
Deflation	Hand-held push button
Power source	1 AA battery (1.5 volt, included)
Battery life	Approximately 2,000 measurements
Operating environment	50ºF to 104ºF (10ºC to 40ºC) Less than 85% relative humidity
Storage environment	-4ºF to 140ºF (-10ºC to 60ºC) Less than 95% relative humidity
Dimensions	Length: 3.9"(100 mm) Width: 1.2"(31 mm) Height: 2.0" (51 mm)
Weight	2.6 oz. (73 g) without battery

Blood pressure measurements determined by the UA-704 are equivalent to those obtained by a trained observer using the cuff/stethoscope auscultation method within the limits prescribed by the American National Standards Institute for electronic or automated sphygmomanometers.

CONTACT INFORMATION

Our products are designed and manufactured using the latest scientific and technological methods, and offer accurate, easy to use, home monitoring and treatment options. Our full product line includes:

- **Digital Blood Pressure Monitors**
- **Manual Blood Pressure Kits**
- **Blood Pressure Cuffs**
- **Stethoscopes**
- **Personal Health Scales**
- **Nebulizers**
- **Digital Thermometers**

This LifeSource blood pressure product is covered by a Lifetime Warranty. See warranty card for details.

Visit our web site at www.LifeSourceOnline.com for warranty registration.

For more information regarding use, care or servicing of your blood pressure monitor, contact:

A&D Medical
A division of A&D Engineering, Inc.
1555 McCandless Drive
Milpitas, CA 95035
LifeSource Health Line (Toll-Free): 1-888-726-9966
www.LifeSourceOnline.com

For Canadian Residents, please contact:
Auto Control Medical
6695 Millcreek Drive, Unit 5
Mississauga, Ontario
L5N 5R8 Canada
Auto Control (Toll-Free): 1-800-461-0991
www.autocontrol.com

IMPORTANT!

If You Need Assistance with the Set-Up or Operation

We Can Help!

Please call us FIRST before contacting your retailer at

LifeSource Health Line

1-888-726-9966 - Toll Free

Auto Control Medical

1-800-461-0991 - In Canada

A specially trained representative will assist you

A division of A&D Engineering, Inc.
1555 McCandless Drive
Milpitas, CA 95035
www.LifeSourceOnline.com

LifeSource is a registered trademark of A&D Medical.

©2005 A&D Medical. All rights reserved.

Specifications subject to change without notice.
I-MAN:704 Printed in China 6/05